

REMARKS / ARGUMENTS

Reconsideration of the application and claims in light of the following remarks is respectfully requested.

I. Status of the Claims

Claims 1, 3 and 7-17 are pending in the present application.

Claims 2 and 4-6 were previously cancelled without prejudice or disclaimer of the subject matter contained therein.

Claims 1, 3 and 7-17 were rejected.

No amendments to the claims are included in this response.

II. Applicants' Reply to the 'Response to Arguments' Section

In response to the argument presented in Applicants' Response filed on June 10, 2011 that the buffer vocabulary of U.S. Patent No. 5,809,471 to Brodsky ("Brodsky") cannot correspond to the audio module as recited independent claim 1 of the present application, the Office Action asserts that "the features upon which applicant relies (i.e., not temporarily stored) are not recited in the rejected claim(s)." See Detailed Action, Page 2. However, it is respectfully submitted that claim 1, in fact, does contain features that were relied upon in making the foregoing argument. Specifically, claim 1 of the present application recites the step of "speaking the vocabulary data to the speech recognition system in an automated manner using the audio module so as to expand the vocabulary database." The buffer vocabulary of Brodsky is not used to speak vocabulary data to a speech recognition system in an automated manner so as to expand the vocabulary database, as required by the audio module of claim 1, and therefore cannot correspond to an audio module. Thus, it is respectfully submitted that the buffer vocabulary of Brodsky, which is merely a temporary database and is incapable of speaking vocabulary data, cannot be interpreted as corresponding to the audio module of claim 1.

Additionally, in the 'Response to Arguments' section, the Office Action asserts, citing col. 4, lines 18-35 of Brodsky, that "Brodsky teaches that the items, words or keywords can

be spoken words, text, visual or audio information.” See Detailed Action, Pages 2-3. However, it is respectfully submitted that, in the cited passage of Brodsky, Brodsky also describes that the items, words or keywords are generally given or converted to a text type format. See Brodsky, col. 4, lines 20-24. It is further respectfully submitted that Brodsky fails to disclose or suggest any embodiment in which the items, words or keywords are spoken to the buffer vocabulary, nor does Brodsky provide any disclosure of how to speak the items, words or keywords which would enable an ordinarily skilled artisan to speak the items, words or keywords in an automated manner. Moreover, Brodsky describes, in the Abstract, that “[t]he items or keywords may be contained in closed caption *text* in a TV signal” and is therefore generally given a text type format or otherwise, as described at col. 4, lines 20-24 of Brodsky, converted to a text type format.

Further, the ‘Response to Arguments’ section of the Office Action fails to address the arguments made in the previous Response filed on June 10, 2011 that Ittycheriah, Brodsky and Besling each also fail to disclose or suggest speaking the vocabulary data to the speech recognition system “in an automated manner using the audio module so as to expand the vocabulary database” as required by claims 1 and 16. The Response filed on June 10, 2011 was in response to the Office Action dated March 11, 2011, which Office Action asserted that Ittycheriah specifically discloses this feature. See Office Action dated March 11, 2011, Page 3. However, as presented again in further detail below, it is respectfully submitted that Ittycheriah fails to disclose this feature. This was previously recognized in an Office Action dated December 22, 2010 which asserted that “automating requires routine skill in the art and as the court held broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.” See Office Action dated December 22, 2010, Section 2, Page 2. However, as previously presented in the Response filed on February 22, 2011 and in the Response filed on June 10, 2011, it is respectfully submitted that this feature is, in fact, not obvious in view of Ittycheriah, or any of the other cited references, and does not merely involve routine skill in the art, nor would automation of Ittycheriah accomplish the same result.

The U.S. Patent and Trademark Office’s policy of compact prosecution “requires that both examiners and applicants provide the information necessary to raise and resolve the

issues related to patentability expeditiously.” *See* Official Gazette of November 7, 2003. However, it is respectfully submitted that Applicants arguments rebutting the assertion that “automating requires routine skill in the art and as the court held broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art” have been presented in each of the previous two responses and still have not been considered or addressed. It is respectfully requested for any subsequent action to consider and address these arguments (presented again below in further detail) so that Applicants are given a fair opportunity to respond.

III. Rejections under 35 U.S.C. § 103

Claims 1, 3, 7-11 and 14-17 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,185,530 to Ittycheriah et al. (“Ittycheriah”) in view of U.S. Patent No. 5,809,471 to Brodsky (“Brodsky”). Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as obvious over Ittycheriah in view of Brodsky and in further view of U.S. Patent No. 6,393,348 to Besling et al. (“Besling”). These rejections are respectfully traversed.

Ittycheriah describes a method of comparing a word, which can uttered by a user into a microphone and received by a speech utterance pre-processor, to an existing vocabulary of words to determine potential acoustic confusion. *See* Ittycheriah, Abstract and col. 4, lines 16-25.

Brodsky describes a method of creating a small dictionary of items or keywords contained in closed caption text of a TV signal for a recently viewed program. *See* Brodsky, Abstract.

Besling describes a system for recognizing a pattern by selecting a recognition model that is suited to a particular user of the system. *See* Besling, col. 4, lines 15-40. Where the input pattern is speech representative data, the user speaks predetermined words or sentences that are used as acoustic training data for recognition by a plurality of acoustic models such that the acoustic model providing the best recognition result can be used. *See* Besling, col. 7, line 66 – col. 8, line 27.

Independent claim 1 of the present application recites a method of training a speech recognition system by “speaking the vocabulary data to the speech recognition system in an automated manner using the audio module so as to expand the vocabulary database” and “providing the audio module with vocabulary data in a streaming mode from a telecommunication network.” Similarly, independent claim 16 recites a “computer-based audio module including a speech synthesis unit configured to receive speech data in a streaming mode from a telecommunication network, wherein the speech data is spoken into the vocabulary database using the audio module so as to expand the vocabulary database.” It is respectfully submitted that any combination of Ittycheriah, Brodsky and Besling, to the extent proper, fails to disclose or suggest the foregoing features of claims 1 and 16.

In contrast, Ittycheriah merely describes providing a speech utterance pre-processor with words spoken by a particular user to determine potential acoustic confusion. *See* Ittycheriah, Abstract and col. 4, lines 16-25. Thus, as acknowledged in the Office Action, Ittycheriah fails to disclose providing an audio module with vocabulary data in a streaming mode from a telecommunication network as required by claims 1 and 16. *See* Detailed Action, Page 4. While Brodsky is relied on as disclosing this feature with reference to the Abstract and col. 3, line 52 – col. 4, line 66 thereof (see Detailed Action, Page 4), it is respectfully submitted that Brodsky does not, in fact, disclose or suggest this feature. While Brodsky describes in these cited passages that the items or keywords may be provided to a buffer vocabulary 104 in real time, Brodsky also describes that the buffer vocabulary 104 merely temporarily stores the items and keywords until the buffer is full. *See* Brodsky, col. 4, lines 49-57. As discussed above, it is respectfully submitted that the buffer vocabulary of Brodsky, which is therefore merely a temporary database and is incapable of speaking vocabulary data, cannot be interpreted as corresponding to the audio module of claim 1. Thus, it is respectfully submitted that the buffer vocabulary of Brodsky is not an audio module, which as required by claims 1 and 16, is also used in the training of the speech recognition system to speak the vocabulary or speech data to the vocabulary database of the speech recognition system. In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *See* M.P.E.P., section 2141.02. Accordingly, it is respectfully submitted that Brodsky fails to

disclose or suggest providing *an audio module* with vocabulary data in a streaming mode from a telecommunication network as required by the audio module as recited in claims 1 and 16. Besling merely describes a method of recognizing a pattern in which a particular user speaks predetermined words or phrases, and therefore also fails to disclose or suggest providing an audio module vocabulary data in a streaming mode from a telecommunication network as required by claims 1 and 16.

Further, it is respectfully submitted that Ittycheriah, Brodsky and Besling each also fail to disclose or suggest speaking the vocabulary data to the speech recognition system “in an automated manner using the audio module so as to expand the vocabulary database” as required by claims 1 and 16. In response to this argument presented earlier with respect to Ittycheriah, the Office asserted that “automating requires routine skill in the art and as the court held broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.” *See* Office Action dated December 22, 2010, Section 2, Page 2. However, as previously presented in the Response to the Office Action dated December 22, 2010 filed on February 22, 2011, it is respectfully submitted that this feature is not obvious in view of Ittycheriah, or any of the other cited references, and does not merely involve routine skill in the art. The subsequent Office Action dated March 11, 2011 and the current Office Action dated August 16, 2011, to which the present Response is made, each assert that Ittycheriah specifically discloses this feature. *See* Office Action dated March 11, 2011, Page 3 and Detailed Action, Page 4. However, Ittycheriah describes providing a speech utterance pre-processor with words spoken *by a particular user* to determine potential acoustic confusion. *See* Ittycheriah, Abstract and col. 4, lines 16-25. Thus, it is respectfully submitted that Ittycheriah fails to disclose speaking the vocabulary data to the speech recognition system in an automated manner using the audio module so as to expand the vocabulary database as required by claims 1 and 16.

Moreover, it is respectfully submitted that Applicants have rebutted the assertion that “automating requires routine skill in the art and as the court held broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art.” *See* Office Action dated December 22, 2010, Section 2, Page 2. The foregoing assertion is taken from *In re Venner*, a case which

dealt with claims directed to a known molding operation having known dwell times and including a timer and solenoid which automatically opened the mold after the known dwell times elapsed. *See* M.P.E.P. Section 2144.04 and *In re Venner*, 262 F.2d 91, 95 (C.C.P.A. 1958). It is respectfully submitted that the foregoing assertion is incorrect with respect to claims 1 and 16 of the present application at least because, unlike in *In re Venner*, the recited automation is not the mere automation of a known manual activity and also provides substantially different results as described below.

In addition to being laborious and time-consuming, having a particular user provide speech data through speaking into a microphone or the like, as described in Ittycheriah, would merely provide acoustic training data that is based on the voice pattern of the particular user, which could differ greatly from the voice pattern of another person. *See* paragraph [0015] of the original specification. Thus, the data used to train the voice recognition system will not match that of the person who will operate the system later. *See* paragraph [0015] of the original specification. Accordingly, it is respectfully submitted that automating a process where a particular speaker provides speech data through a microphone, as described in Ittycheriah, would not operate to provide different voice patterns and would result in insufficient training of a voice recognition system which would only be effective for the particular user.

Because Ittycheriah, Brodsky and Besling fail to disclose or suggest at least the above-recited features of independent claims 1 and 16, it is respectfully submitted that any combination of Ittycheriah, Brodsky, and Besling, to the extent proper, could not render those claims or any of their respective dependent claims 3, 7-15 and 17 obvious.

Further, it is respectfully submitted that the combination of Ittycheriah with Brodsky is not proper. According to the Office Action, it would have been obvious to modify Ittycheriah's method as described by Brodsky to obtain and store expanded information for items and keywords. *See* Detailed Action, Page 4. However, it is unclear how the method of Ittycheriah would utilize such items or keywords, or how the method would be modified to do so, or what expanded information would be provided by the simple text, temporarily stored items and keywords of Brodsky. As discussed above, Brodsky merely describes maintaining a small, continuously changing dictionary of keywords entered in text format. However, such

keywords would not be useful in the method of Ittycheriah which attempts to determine potential acoustic confusion from a word spoken by a user in comparison to a stored vocabulary of words. *See* Ittycheriah, Abstract. In fact, it would be impossible to determine potential acoustic confusion from a word input in text, and therefore the proposed modification of Ittycheriah would render Ittycheriah inoperable for its intended purpose.

Reconsideration and withdrawal of the respective rejections under 35 U.S.C. § 103(a) is therefore respectively requested.

CONCLUSION


In view of the foregoing arguments, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

The Commissioner is hereby authorized to charge any unpaid fees deemed required in connection with this submission, including any additional filing or application processing fees required under 37 C.F.R. § 1.16 or 1.17, or to credit any overpayment, to Deposit Account No. 12-1216.

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Respectfully submitted,

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